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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,981

07/10/2003

Yaron Mayer

1253

7590

03/09/2006

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EXAMINER

CULLER, JILL E

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,981

Applicant(s)

MAYER ET AL.

Examiner

Jill E. Culler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 8-11, 13-16, 19-22, 25, 27, 29-35 and 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 12, 17, 18, 23, 24, 26, 28, 36, 37, and 39-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's traversal of the restriction requirement is not timely, as the restriction was finalized in the previous office action. In addition, claim 6 was included in the withdrawn group because applicant did not indicate that it should be included with the claims that were to be examined. However, as applicant is correct in stating that the claim refers to the subject matter of the examined group, it will be included for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,570,451 to Sakaizawa et al.

Sakaizawa et al. teaches a laser printer, 7, wherein after the fixing elements, 5a-5c, that set the toner, paper, P1, moves through a position of another type of printing element, 16, that can add color where needed and said color printing elements can print on at least one side of the paper, see column 5, line 55 - column 7, line 65 and Figure 6 in particular, and in areas where there is no color the feeder lets the page move much faster, so that the addition of colors only slows down the printing by a minimum percent.

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See column 7, line 66 - column 8, line 3. It should be noted that by claiming these elements in the alternative, only one of the alternatives must be true for the claim to be rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7, 12, 18, 26 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of U.S. Patent No. 6,032,015 to Umeda et al.

With respect to claims 1 and 12, Silverbrook et al. teaches a system and method for printing on both sides of pages or papers in a printer during the same printing pass by using at least one printing element, 142, on each side of the paper and stabilizing even non-continuous papers, without the need for conveyor belts, without the need for stretching the paper between two sets of rollers and printing between said two sets, and without the paper having to make a u-turn around the second printing element, and wherein the printing elements are part of at least one of: a printer, a fax machine, a photocopier, and any machine that uses printing elements, comprising: a) means, 68, for pulling pages which are being printed on both sides while preventing smearing on both sides of the page, by using stabilizers only at the printing position, and upstream of

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the printing position; and b) at least one printing element, 142, on each side of the paper capable of printing while printing is also going on at the other side of the paper, wherein the printing heads are arranged so that they don't disturb each other and the inks or toners on the two sides of the paper don't interact with each other. See column 8, line 43 - column 10, line 30 and Figures 9 and 13 in particular.

Sliverbrook et al. does not teach printing without using transfer rollers for transferring inkjet to the paper.

Umeda et al. teaches an apparatus for printing on both sides of a page in a printer that uses laser printing elements and therefore prints without using transfer rollers for transferring inkjet to the paper.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Silverbrook et al. to have the laser printing elements of Umeda et al. in order to print more precise images.

With respect to claims 7 and 18, Silverbrook et al. does not teach that the printer is a laser printer and the paper is given a stronger electric charge and the toner powder on both sides of the paper is given a weaker electric charge in order to avoid rejection between the powders from both sides of the paper.

Umeda et al. teaches a laser printer wherein the paper is given a stronger electric charge and the toner powder on both sides of the paper is given a weaker electric charge in order to avoid rejection between the powders from both sides of the paper. See column 6, line 43 - column 7, line 38.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Silverbrook et al. to have the laser printing elements, toner and paper charges of Umeda et al. in order to print more precise images and to minimize smearing of the images.

With respect to claim 26, Silverbrook et al. does not teach that the printer is a laser printer and there is a shift in the position of the two drums so that the paper does not touch

Umeda et al. teaches a laser printer wherein the drums are movable. See column 13, lines 55-67.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Silverbrook et al. to have the movable rolls of Umeda et al., in order to prevent smudging of the paper if the elements are not in use.

6. Claims 6, 17, 28, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Umeda et al., as in the above rejection of claims 1, 7, 12, 18, 26 and 39, and further in view of U.S. Patent No. 5,552,857 to Ishikawa

Silverbrook et al. teaches all that is claimed, as in the above rejection of claims 1, 7, 12, 18, 26 and 39, except that the printer is a laser printer and at least one of the following configurations exists: at least two cartridges are used next to each other so that the drums are closely facing each other and the paper can pass between at least two drums at the same time, and at least one cartridge is used to deal with both sides of

the paper, so that the paper passes between at least one pair of drums that are connected to the same cartridge, wherein a number of double-drum toner cartridges are used for color printing.

Ishikawa teaches a laser printer having a toner cartridge having a plurality of drums. See column 4, lines 4-20 and Figure 1 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Silverbrook et al. to have the laser printing cartridges of Ishikawa on either side of the paper, such that the cartridge drums are facing each other and the paper is passing between at least two drums at the same time in order to be able to print more complex images on both sides of the paper.

7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Umeda et al. as applied to claims 1, 7, 12, 18, 26 and 39 above, and further in view of U.S. Patent No. 6,188,853 to Ishida et al.

With respect to claims 23-24, Silverbrook et al. and Umeda et al. teach all that is claimed, as in the above rejection of claims 1, 7, 12, 18, 26 and 29, except that the printer is a laser printer which uses LED arrays and at least two LED arrays are used, one for each side of the paper.

Ishida et al. teaches a printing apparatus having two LED arrays arranged on each side of the paper for printing.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the system of Silverbrook et al. to LED printing arrays of Ishida et al. in order to print more precise images.

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Umeda et al., as in the above rejection of claims 1, 7, 12, 18, 26 and 39, and further in view of Sakaizawa et al.

Silverbrook et al. teaches all that is claimed, as in the above rejection of claims 1, 7, 12, 18, 26 and 39, except that the printer is a laser printer wherein after the fixing elements that set the toner, the paper moves through a position of another type of printing element that can add color where needed and said color printing elements can print on at least one side of the paper.

Sakaizawa et al. teaches a laser printer, 7, wherein after the fixing elements, 5a-5c, that set the toner, paper, P1, moves through a position of another type of printing element, 16, that can add color where needed and said color printing elements can print on at least one side of the paper. See column 5, line 55 - column 7, line 65 and Figure 6 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Silverbrook et al. to use the laser printer and secondary printer of Sakaizawa et al. in order to be able to produce more complex images.

Response to Arguments

9. Applicant's arguments filed November 30, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Umeda talks about the paper having no charge and the toner powders having opposite charges, rather than the weaker and stronger charges in the claims, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Because Umeda teaches supplying a charge to the paper and the toners it shows that it is capable of providing the stronger and weaker charges as in applicant's claim and therefore meets the claims.

In response to applicant's argument that the Ishikawa patent does not teach a single toner cartridge having a plurality of drums, the arrangement in Ishikawa of drums placed next to each other, as in Figure 7, can be broadly considered to be the equivalent of a cartridge and therefore can be used to reject the claim.

In response to applicant's argument that Ishikawa does not deal with double sided printing, in the above rejection Ishikawa has not been relied upon for a teaching of double sided printing, merely for the plurality of drums, and therefore is not required to teach the double sided printing as well.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

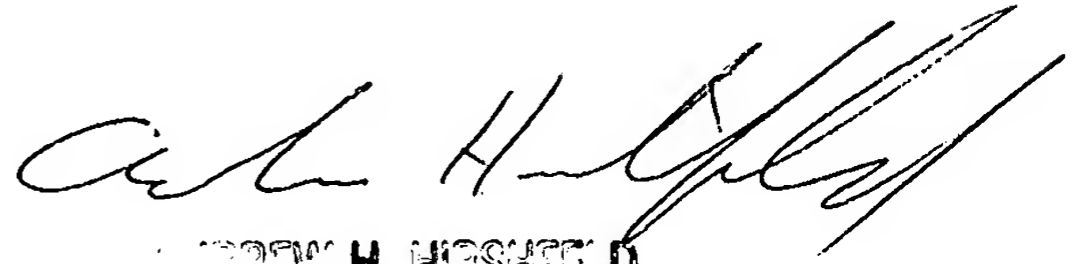
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-F 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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